

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

10' 517 145

(43) International Publication Date
18 December 2003 (18.12.2003)

PCT

(10) International Publication Number
WO 03/103903 A1(51) International Patent Classification⁷: B25J 9/00, 9/18

(74) Agent: ABB AB; Legal & Compliance, Intellectual Property, Forskargränd 8, S-SE-721 78 VÄSTERÅS (SE).

(21) International Application Number: PCT/SE03/00933

(22) International Filing Date: 5 June 2003 (05.06.2003)

(25) Filing Language: Swedish

(26) Publication Language: English

(30) Priority Data:
0201761-4 7 June 2002 (07.06.2002) SE

(71) Applicant (for all designated States except US): ABB AB [SE/SE]; Kopparbergsvägen 2, S-SE-721 83 VÄSTERÅS (SE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): RYEGÅRD, Henrik [SE/SE]; Profilgatan 5, S-723 36 VÄSTERÅS (SE). PAHLM, Fredrik [SE/SE]; Domkyrkoespl. 4 B, S-722 13 VÄSTERÅS (SE). BERGSJÖ, Jesper [SE/SE]; Slalomgatan 18, S-722 40 VÄSTERÅS (SE). ERIKSSON, Peter [SE/SE]; Barrskogsvägen 5, S-723 41 VÄSTERÅS (SE). BIRD-RADOLOVIC, Ian [GB/SE]; Mälbyvägen 19B, S-722 33 VÄSTERÅS (SE).

(81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

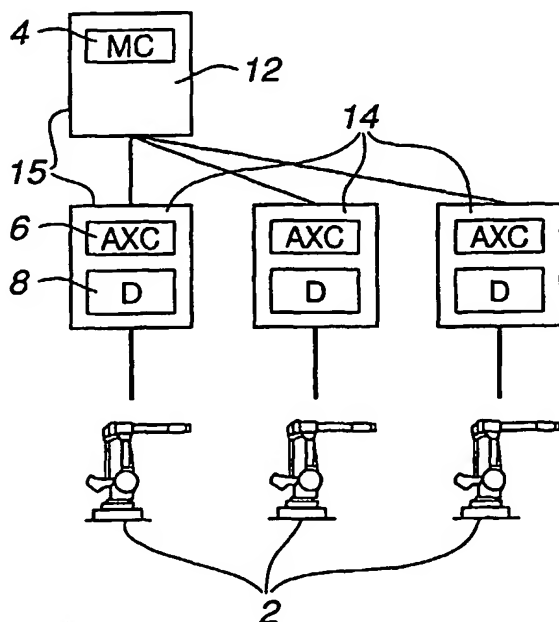
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A CONTROL SYSTEM AND METHOD FOR CONTROLLING ONE OR SEVERAL MANIPULATORS



(57) Abstract: A control unit for controlling one or more manipulators (2), wherein the control system comprises one or more computers (4, 6) and one or more drive units (8) for controlling the manipulator. The control system comprises a plurality of separate modules (12, 14) adapted to handle various functions, wherein each of the modules has its own power supply and is adapted to communicate with at least one of the other modules, the computers (4, 6) and the drive units (8) being arranged in the modules. A method for controlling one or more manipulators, wherein the control system comprises one or more computers (4, 6) and one or more drive units (8) for controlling the manipulators. The control system is divided into a plurality of separate modules adapted to handle various functions, wherein the modules are provided with their own power supply and are brought to communicate with at least one of the other modules.

WO 03/103903 A1